

ABSTRACT OF THE DISCLOSURE

A video signal is processed using dither coefficients. Dither coefficients pattern signals are generated. Each pattern signal carries positive and negative dither coefficients arranged in an $(n \times m)$ matrix where "n" and "m" being positive integers larger than zero, the sum total of the coefficients being zero. One of the pattern signal is selected for each predetermined unit of picture carried by the video signal. Or, it is selected according to locations of dither coefficients on pixels arranged on a display panel. Dither coefficients of the selected pattern signal are added to an input video signal, thus outputting a video signal to be supplied to the display panel. Instead of the dither coefficients pattern signals, dither pattern signals can be generated, each carrying positional data indicating locations of dither coefficients on the pixels on the display panel. A dither coefficient signal to be added to the input signal is generated which carries the dither coefficients arranged in a matrix for each gradation level of the input video signal in response to one of the dither pattern signal. Dither coefficients pattern signals can be generated according to color gradation levels of data carried by the input video signal, the data being supplied to each of dot matrices that constitute the pixels, each pattern signal carrying dither coefficients arranged in a matrix corresponding to each dot matrix. One of dither coefficients is selected from each pattern signal with respect to each dot matrix, thus outputting a dither coefficients pattern signal that carries the dither coefficients selected from the pattern signals and arranged in the matrix. The dither coefficients carried by the output pattern signal to be added to the input video signal are adjusted so that the sum total of the dither coefficients carried by the output pattern signal is zero.

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